

On the full monomial automorphism groups of Reed-Solomon codes and their MDS-extensions

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Abstract

© 2016, Pleiades Publishing, Ltd. We determine the full monomial automorphism groups of Reed-Solomon codes and of their MDS-extensions by adding one, two, and three symbols. We show that several Reed-Solomon codes, extended by two symbols, are equivalent to constacyclic codes and, under certain conditions, to cyclic codes.

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Keywords

automorphisms of codes, Error correction codes, Reed-Solomon codes